

ADJUSTMENTS

Before commencing

1. First turn the power on about 5 minutes to ensure that the amplifier is properly warmed up before commencing any adjustments.
2. Use two digital voltmeters in steps 3 and 4 in order to adjust both channels simultaneously.

Step	Adjustment	Adjustment Conditions	Adjustment Points	Test Points	Rating	Measuring Equipment
1	Idling current	Set VOLUME control to minimum position	Main c. board 1 • VR303 (Lch) • VR304 (Rch)	• TP1 – TP2 (Lch) • TP3 – TP4 (Rch)	10 ± 3 mV	Digital voltmeter (multimeter)
2	Offset voltage	Set VOLUME control to minimum position	Main c. board 1 • VR301 (Lch) • VR302 (Rch)	• Between the TP2 and Ground (Chassis). (Lch) • Between the TP4 and Ground (Chassis). (Rch)	0 ± 10 mV	Digital voltmeter or oscilloscope
3	$\pm B$ power line voltages	No load	Main c. board 1 VR306	• Between the TR331 collector and ground (L). • Between the TR332 collector and ground (R).	DC+54.7 ± 0.2 V (U,C,A,B,R) DC+54.0 ± 0.2 V (G)	Digital voltmeter (multimeter)
				• Between the TR333 collector and ground (L). • Between the TR334 collector and ground (R).	DC-54.7 ± 0.2 V (U,C,A,B,R) DC-54.0 ± 0.2 V (G)	
4	Photocoupler voltage check	• Set VOLUME control to minimum position. • No load.	Control c. board 2 VR501 (*)	TP3 – P1	1.2 ± 0.1 V(*)	Digital voltmeter (multimeter)
5	Tone control section frequency response	• MAIN DIRECT OFF • BASS and TREBLE DEFEAT • Filter switches OFF	Tone control c. board 3 • VR207 (Lch) • VR208 (Rch)	1. Apply a 1kHz sine wave to the TUNER terminals, and adjust to obtain a +10dBm output level at the speaker terminals (with 8 ohm load). 2. Change the frequency to 50Hz, and adjust VR207 and 208 to obtain an output level of $+10 \pm 0.1$ dBm.		Oscillator and level meter

* If the rated specification is not satisfied, adjust the control c. board VR501 and the main c. board VR306 alternately to obtain the rated $\pm B$ and voltage across TP3 – P1.

* The step 4 voltage check is only required if the photocoupler is exchanged.

Note, U.....U.S.A. model B.....British model
 C.....Canadian model R.....General model
 A.....Austrian model G.....North European model